

Case 3473***Conops testacea* Linnaeus, 1767 (currently *Myopa testacea*) (Insecta, Diptera): proposed conservation of usage of the specific name by the designation of a neotype**

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Abstract. The purpose of this application, under Article 75.6 of the Code, is to conserve the established and current species concept and usage of the name *Myopa testacea* (Linnaeus, 1767). This usage is threatened by the designation of a specimen in Linnaeus's collection as a lectotype of *Conops testacea* which implied that the name was misapplied by previous authors. This designation has not so far been accepted by any subsequent authors, and it is therefore proposed that the long established usage of the name be conserved by setting aside all previous type fixations for *M. testacea* (Linnaeus, 1767) and that a neotype that is in accord with the current use of the name be designated.

Keywords. Nomenclature; taxonomy; Diptera; CONOPIDAE; MYOPINAE; *Myopa*; *Myopa testacea*; *Myopa extricata*; *Myopa pellucida*; thick-headed flies; Palaearctic region.

1. The subject of this application is the need to resolve confusion which has resulted from the transfer of a specific name for a well known and widespread species in the family known as thick-headed flies (Diptera, CONOPIDAE). Linnaeus (1767, p. 1006) established the name *Conops testacea* for a species of fly in this family which was later placed in the genus *Myopa* Fabricius, 1775. The taxonomy of the species of this genus is complex, there being considerable intraspecific variation, with resulting confusion between the species.

2. Collin (1960, p. 151) established the name *Myopa extricata* for a species in which, inter alia, the black markings on the thoracic dorsum of the adult do not extend as far as the base of the scutellum. He reserved the name *Conops testacea* for another species in which the black markings do extend to the base of the scutellum. Other characters also show that these two species are distinct, particularly in the male and female genitalia. Stuke & Clements (2005, p. 7) have recently proposed that *Myopa extricata* Collin, 1960 is a junior synonym of *Phorosia pellucida* Robineau-Desvoidy, 1830, p. 244 (currently *Myopa pellucida*).

3. Collin (1960) noted that most of the earlier names for species of the genus *Myopa* had been extensively misused, causing the synonymy of individual species to become very complex. He suggested, in our view correctly, that the true identity of the species dealt with by older authors would always remain open to question and that it would therefore be advisable to treat the older names as having been stabilised by later students either for a definite species, or for a small species-group, and to deal with them on that basis except where misidentification could definitely be proved.

4. All subsequent significant taxonomic works have followed Collin's interpretation of *Conops testacea* either implicitly (e.g. Lyneborg, 1962; Smith, 1969; Stuke & Clements, 2008) or by default through using the extent of the wing-patterning as a key character to separate *Conops testacea* and *Myopa extricata*. Works in which the latter applies include the major revision by Chvála (1965) of central and western European MYOPINAE, and the key-works of Bańkowska (1979), Veen (1984), Dunk (1994), Rivošecchi (1996) and Stuke (1997). In fact, neither the patterning of the wings nor the extent of black markings on the thorax are entirely diagnostic in all cases.

5. Thompson (1997) reviewed the Linnaean species of *Conops* Linnaeus, 1758. He stated that the sole specimen standing under the name '*Conops testacea*' in the Linnaean collection, a female, has a mixture of features characteristic of both *testacea* and *extricata*, although the characteristics listed by him are in our opinion mostly referable to the latter. This specimen was also examined by DKC in 1995, when it was confirmed that the black markings of the thorax do not extend to the base of the scutellum, and that in addition the specimen does not agree in other characters with the established concept of *Conops testacea*, including in the visible features of the female genitalia. The specimen generally agrees with the current understanding of *Myopa extricata* except in having comparatively poorly marked wings, which could either be an artefact of age or a product of the known variability of this feature. Thompson (1997) acknowledged the opinion of DKC that the specimen was in fact most probably a pale and poorly-marked specimen of *Myopa extricata*.

6. Thompson (1997, p. 267) designated this specimen as lectotype for the *Conops testacea*, making *Myopa extricata* Collin, 1960 a junior subjective synonym. This had the effect of transferring the name *Conops testacea* to the species previously known as *Myopa extricata*, leaving the species in which the thorax is normally black up to the base of the scutellum requiring a new name. As far as we are aware no such name has been proposed to date, presumably because several names have been cited as possible synonyms in earlier literature. None of these has been elsewhere treated as a valid name for the species to date.

7. It is not possible to be certain from the description given by Linnaeus on which species the name *Conops testacea* was based, although the statement 'alis hyalinis' would suggest that it was probably the *testacea* of Collin and other modern authors. In addition, there is no way of knowing whether or not the specimen in the Linnaean collection (Box 23), which is labelled 'testacea ex deper' and also 'ferruginea' (verso '4') is an authentic type specimen, one of a series of syntypes or merely a specimen which was added to the collection at a later date: Linnaeus (1767) gives no information on this matter. Regarding the uncertainty about whether specimens in Linnaeus's collection are syntypes, see also Case 3090 (BZN 57(2): 87–93, June 2000),

and the resulting Opinion 1982 (September 2001; BZN **58**(3): 241–242) and Case 3259 (December 2004; BZN **61**(4): 241–245), and the resulting Opinion 2153 (June 2006; BZN **63**(2): 146–147).

8. The ‘habitat’ (= type locality) of *Conops testacea* was stated by Linnaeus (1767) to be ‘Europa australis. Ascanius’. ‘Ascanius’ could possibly refer to the area around Iznik Gölü (Lake Iznik, Bursa Province, Turkey) which was anciently known as ‘Ascanius’, but it is considered more likely to refer either to another collector or describer, or to a collection where he had seen a specimen of the species being described. Peder Ascanius (1723–1803), a Norwegian biologist, was amongst the known students of Linnaeus, and elsewhere in his work of 1767 Linnaeus refers to specimens which were presumably either collected by others, described by others or standing in the collections of others, using this same format (e.g. under *Musca diadema* (currently *Medetera diadema*) (p. 982) ‘Habitat in Europa. Fabricius.’ and *Tabanus calens* (p. 1000) ‘Habitat in America. Mus.[eum] De Geer.’). This format could suggest that the specimen on which the original description was based did not necessarily lie in the collection of Linnaeus, in which case the designation by Thompson (1997) would be invalid and no ruling by the Commission would be required. Unfortunately, however, it is not possible to be certain whether or not this is the case.

9. As far as we are aware, no other authors have to date followed the interpretation proposed by Thompson (1997). Despite being quite widely known about in the dipterological community, Thompson’s action appears to have been consistently ignored by subsequent workers. This is possibly due to uncertainty regarding the implications of the action with respect to other related species, as well as general awareness of the taxonomic difficulties and instability inherent in the *testacea*-group as a whole. It may also be due in part to the comparatively small number of dipterists who have been actively involved in the taxonomy of the group in recent years, all of whom appear to have tacitly concluded that the interpretation proposed by Thompson (1997) should be ignored.

10. The previous concept of the species known as *Conops testacea* has been well established and in common usage for nearly 50 years. Recently published checklists (e.g. Chandler, 1998, British Isles; Merz & Clements, 1998, Switzerland; Kassebeer, 1999, Germany; Pakalniškis *et al.* 2000, Lithuania; Stuke & Petersen, 2001, Denmark; Weele, 2001, Hungary; Carles-Tolrá & Báez, 2002, Spain, Portugal and Andorra; Veen, 2002, The Netherlands; Pape & Clements, 2005, Europe; Chvála, 2006, Czech Republic & Slovakia) have all continued to use the established species interpretation.

11. In addition, there have been numerous other publications relating to the CONOPIDAE in the period since 1997, and as far as we can ascertain none of these have followed the interpretation proposed by Thompson (1997). Relevant selected examples include taxonomic works (e.g. Chao & Qiao, 1998; Zimina, 2000) as well as studies in ecology (e.g. Flügel, 1999), faunistics (e.g. Carles-Tolrá, 1999; Mei, 2000; Barták & Kubik, 2005; Withers, 2007), nature conservation (e.g. Mei, 2002; Arnold & Jentsch, 2004) and agriculture (e.g. Ssymank, 2001). A list of 34 additional references demonstrating the prevailing usage of the names *Myopa testacea* and/or *Myopa extricata* [= *pellucida*] after 1997 is held by the Commission Secretariat.

12. The interpretation resulting from the lectotype designation proposed by Thompson (1997) nevertheless remains taxonomically valid and could theoretically be adopted at any point in the future. The published evidence to date suggests that such adoption is unlikely to be universal, however, and this could then lead to the development of two parallel avenues of interpretation in the taxonomic literature. The interpretation proposed by Thompson (1997) therefore represents an additional potential source of confusion in a group which is already beset by considerable difficulties in identification and interpretation. The transfer of the well-recognised and understood name *Conops testacea* (currently *Myopa testacea*) to another species would threaten stability and universality in the nomenclature of the group.

13. Both *Myopa testacea* of authors and *M. extricata* of authors are widespread species, occurring throughout the Palaearctic region and beyond. In addition it is likely that other sibling species may yet be segregated in the future, possibly leading to further confusion and misapplication of names. It is therefore considered important and desirable that the previous and, until present, universal use of the name *Conops testacea* (currently *Myopa testacea*) be maintained.

14. In order to fix the established usage of the name *Conops testacea* we therefore propose that the Commission should set aside the lectotype designation by Thompson (1997) and designate a neotype in accordance with Article 75.6 of the Code. We have accordingly selected a male specimen in the collections held by the Natural History Museum, London which agrees closely with the currently accepted concept of the species *Conops testacea*, and this has been labelled: 'ENGLAND, I.o.W. [=Isle of Wight]/Ventnor – Steephill/Cove Area/9.vi.1979/G.R. Else. NEO-TYPE designated by D.K. Clements, J.-H. Stuke & P.J. Chandler, July 2008', subject to the Commission's ruling on this application.

15. We recognise that the designation of a specimen from north-western Europe is potentially at odds with the description given by Linnaeus of a species from 'Europa australis'. We justify this, however, on the grounds that the selected specimen agrees absolutely with the concept of *Conops testacea* (currently *Myopa testacea*) as applied by modern authors from Collin (1960) onwards, and also that it both agrees with, and does not in any way conflict with, the description given by Linnaeus (1767). In particular, the specimen agrees absolutely with the species concept as defined in the most recent and comprehensive treatment of the *Myopa testacea* species-group provided by Stuke & Clements (2008). During the preparation of the latter work these authors found substantially greater variation in the characters of *Myopa testacea* specimens from southern Europe, particularly with respect to coloration, thus raising the possibility that further sibling species await taxonomic segregation in the southern European region.

16. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous type fixations for the nominal species *Conops testacea* Linnaeus, 1767, and to designate as neotype the male specimen deposited in the Natural History Museum, London, as specified in para. 14;
- (2) to place on the Official List of Specific Names in Zoology the name *testacea* Linnaeus, 1767, as published in the binomen *Conops testacea* and as defined by the neotype designated in (1) above.

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